CLAIMS:

1. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on compressed moving image data, the image processing apparatus comprising:

division means for dividing the compressed moving image data into a target part to be corrected and a non-target part not to be corrected;

decoding means for obtaining decoded data by decoding the target part;

correction means for obtaining corrected decoded data by carrying out the image enhancement processing on the decoded data;

encoding means for encoding the corrected decoded data; and

combination means for obtaining the processed compressed moving image data by combining the target part that has been encoded with the non-target part,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

2. (Cancelled.)

3. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on compressed moving image data obtained according to a compression method using a first frame as a reference frame, the image processing apparatus comprising:

division means for dividing the compressed moving image data into the first frame and other frames;

decoding means for obtaining a decoded first frame by decoding the first frame;

correction means for obtaining a corrected decoded first frame by carrying out the image enhancement processing on the decoded first frame;

encoding means for obtaining a corrected first frame by encoding the corrected decoded first frame; and

combination means for obtaining the processed compressed moving image data by combining the corrected first frame with the other frames,

wherein the image enhancement processing comprises at least one of gradation

correction, white balance correction, density correction, and sharpness processing.

4. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on compressed moving image data comprising intra frames and inter frames, the image processing apparatus comprising:

division means for dividing the compressed moving image data into the intra frames and the inter frames;

decoding means for obtaining decoded intra frames by decoding the intra frames;

correction means for obtaining corrected decoded intra frames by carrying out the image enhancement processing on the decoded intra frames;

encoding means for obtaining corrected intra frames by encoding the corrected decoded intra frames; and

combination means for obtaining the processed compressed moving image data by combining the corrected intra frames with the inter frames,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

5. (Original) The image processing apparatus according to Claim 4 further comprising block division means for dividing the inter frames into intra blocks and inter blocks,

the decoding means further obtaining decoded intra blocks by decoding the intra blocks,

the correction means further obtaining corrected decoded intra blocks by carrying out the image enhancement processing on the decoded intra blocks,

the encoding means further obtaining corrected intra blocks by encoding the corrected decoded intra blocks, and

the combination means obtaining the processed compressed moving image data by combining the corrected intra frames and the corrected intra blocks with the inter blocks.

6. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on

compressed moving image data comprising I frames, P frames, and B frames, the image
processing apparatus comprising:

division means for dividing the compressed moving image data into the I frames, the
P frames and the B frames;

decoding means for obtaining decoded I frames and decoded P frames by decoding
the I frames and the P frames;

correction means for obtaining corrected decoded I frames and corrected decoded P
frames by carrying out the image enhancement processing on the decoded I frames and on the
decoded P frames;

encoding means for obtaining corrected I frames and corrected P frames by encoding
the corrected decoded I frames and the corrected decoded P frames; and

combination means for obtaining the processed compressed moving image data by
combining the corrected I frames and the corrected P frames with the B frames,

wherein the image enhancement processing comprises at least one of gradation
correction, white balance correction, density correction, and sharpness processing.

7. (Original) The image processing apparatus according to Claim 6 further
comprising block division means for dividing the B frames into intra blocks and inter blocks,

the decoding means further obtaining decoded intra blocks by decoding the intra
blocks,

the correction means further obtaining corrected decoded intra blocks by carrying
out the image enhancement processing on the decoded intra blocks,

the encoding means further obtaining corrected intra blocks by encoding the
corrected decoded intra blocks, and

the combination means obtaining the processed compressed moving image data by
combining the corrected I frames, the corrected P frames, and the corrected intra blocks with
the inter blocks.

8. (Previously Presented) An image processing apparatus for obtaining processed
compressed moving image data by carrying out image enhancement processing on
compressed moving image data mainly comprising discrete cosine transform (DCT)
coefficient data and motion vector data of each frame, the image processing apparatus

comprising:

extraction means for extracting the DCT coefficient data and the motion vector data from the compressed moving image data;

decoding means for obtaining decoded data by decoding the compressed moving image data with use of the DCT coefficient data and the motion vector data;

correction means for obtaining corrected decoded data by carrying out the image enhancement processing on the decoded data; and

encoding means for obtaining the processed compressed moving image data by encoding the corrected decoded data,

wherein the encoding means encodes the corrected decoded data by using the motion vector data obtained by the extraction means, and

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

9. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on compressed moving image data comprising a plurality of frames, the image processing apparatus comprising:

division means for dividing the compressed moving image data into target frames and non-target frames;

decoding means for obtaining decoded frames by decoding the target frames;

correction means for obtaining corrected decoded frames by carrying out the image enhancement processing on the decoded frames;

encoding means for obtaining corrected frames by encoding the corrected decoded frames; and

combination means for obtaining the processed compressed moving image data by combining the corrected frames with the non-target frames, wherein the correction means comprises:

correction parameter calculation means for calculating a correction parameter for each of the decoded frames by using data of a corresponding decoded frame;

parameter adjustment means for obtaining an adjusted parameter for each of the decoded frames by adjusting the correction parameter thereof, with use of the correction

parameter for the decoded frame or frames that at least one of precedes and follows the decoded frame corresponding to the correction parameter that is going to be adjusted; and

correction execution means for carrying out the image enhancement processing on each of the decoded frames by using the adjusted parameter,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

10. (Previously Presented) The image processing apparatus according to Claim 9, wherein the parameter adjustment means sets the adjusted parameter for each of the decoded frames as an average of the correction parameter thereof and the correction parameter of at least one of the decoded frames that at least one of precedes and follows the corresponding decoded frame.

11. (Previously Presented) An image processing apparatus for obtaining processed compressed moving image data by carrying out image enhancement processing on compressed moving image data comprising an intra frame and inter frames, the image processing apparatus comprising:

division means for dividing the compressed moving image data into the intra frame, target inter frames and non-target inter frames;

decoding means for obtaining decoded frames comprising a decoded intra frame and decoded target inter frames by decoding the intra frame and the target inter frames;

correction means for obtaining corrected decoded frames by carrying out the image enhancement processing on the decoded frames;

encoding means for obtaining corrected frames by encoding the corrected decoded frames; and

combination means for obtaining the processed compressed moving image data by combining the corrected frames with the non-target inter frames, wherein

the correction means carries out the image enhancement processing on the decoded intra frame by calculating a correction parameter therefor and on the decoded target inter frames by using the correction parameter of the decoded intra frame that immediately precedes the decoded target inter frames,

wherein the image enhancement processing comprises at least one of gradation

correction, white balance correction, density correction, and sharpness processing.

12. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data, the image processing comprising:

dividing the compressed moving image data into a target part to be corrected and a non-target part not to be corrected;

decoding the target part for obtaining decoded data;

carrying out the image enhancement processing on the decoded data for obtaining corrected decoded data;

encoding the corrected decoded data; and

combining the target part that has been encoded with the non-target part for obtaining the processed compressed moving image data,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

13. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data obtained according to a compression method using a first frame as a reference frame, the image processing comprising:

dividing the compressed moving image data into the first frame and other frames;

decoding the first frame for obtaining a decoded first frame;

carrying out the image enhancement processing on the decoded first frame for obtaining a corrected decoded first frame;

encoding the corrected decoded first frame for obtaining a corrected first frame; and

combining the corrected first frame with the other frames for obtaining the processed compressed moving image data,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

14. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data comprising intra frames and inter frames, the image processing comprising:

dividing the compressed moving image data into the intra frames and the inter frames;

decoding the intra frames for obtaining decoded intra frames;

carrying out the image enhancement processing on the decoded intra frames for obtaining corrected decoded intra frames;

encoding the corrected decoded intra frames for obtaining corrected intra frames; and

combining the corrected intra frames with the inter frames for obtaining the processed compressed moving image data,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

15. (Previously Presented) The machine-readable storage medium encoded with a computer program according to Claim 14,

dividing further comprising dividing the inter frames into intra blocks and inter blocks,

decoding being decoding the intra frames and the intra blocks for obtaining the decoded intra frames and decoded intra blocks,

carrying out the image enhancement processing being carrying out the image enhancement processing on the decoded intra frames and on the decoded intra blocks for obtaining the corrected decoded intra frames and corrected decoded intra blocks,

encoding being encoding the corrected decoded intra frames and the corrected decoded intra blocks for obtaining the corrected intra frames and corrected intra blocks, and

combining being combining the corrected intra frames and the corrected intra blocks with the inter blocks for obtaining the processed compressed moving image data.

16. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed

moving image data comprising I frames, P frames, and B frames, the image processing comprising:

dividing the compressed moving image data into the I frames, the P frames and the B frames;

decoding the I frames and the P frames for obtaining decoded I frames and decoded P frames;

carrying out the image enhancement processing on the decoded I frames and on the decoded P frames for obtaining corrected decoded I frames and corrected decoded P frames;

encoding the corrected decoded I frames and the corrected decoded P frames for obtaining corrected I frames and corrected P frames; and

combining the corrected I frames and the corrected P frames with the B frames for obtaining the processed compressed moving image data,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

17. (Previously Presented) The machine-readable storage medium encoded with a computer program according to Claim 16, dividing further comprising dividing the B frames into intra blocks and inter blocks,

decoding being decoding the I frames, the P frames, and the intra blocks for obtaining the decoded I frames, the decoded P frames and decoded intra blocks,

carrying out the image enhancement processing being carrying out the image enhancement processing on the decoded I frames, the decoded P frames and the decoded intra blocks for obtaining the corrected decoded I frames, the corrected decoded P frames, and corrected decoded intra blocks,

encoding being encoding the corrected decoded I frames, the corrected decoded P frames and the corrected decoded intra blocks for obtaining the corrected I frames, the corrected P frames and corrected intra blocks, and

combining being combining the corrected I frames, the corrected P frames, and the corrected intra blocks with the inter blocks for obtaining the processed compressed moving image data.

18. (Previously Presented) A machine-readable storage medium encoded with a

computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data mainly comprising discrete cosine transform (DCT) coefficient data and motion vector data of each frame, the image processing comprising:

extracting the DCT coefficient data and the motion vector data from the compressed moving image data;

decoding the compressed moving image data with use of the DCT coefficient data and the motion vector data for obtaining decoded data;

carrying out the image enhancement processing on the decoded data for obtaining corrected decoded data; and

encoding the corrected decoded data for obtaining the processed compressed moving image data,

wherein encoding being encoding the corrected decoded data by using the motion vector data obtained at extracting,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

19. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data comprising a plurality of frames, the image processing comprising:

dividing the compressed moving image data into target frames and non-target frames;

decoding the target frames for obtaining decoded frames;

carrying out the image enhancement processing on the decoded frames for obtaining corrected decoded frames;

encoding the corrected decoded frames for obtaining corrected frames; and

combining the corrected frames with the non-target frames for obtaining the processed compressed moving image data ,

wherein carrying out the image enhancement processing further comprises:

calculating a correction parameter for each of the decoded frames by using data of a corresponding decoded frame;

obtaining an adjusted parameter for each of the decoded frames by adjusting the

correction parameter thereof with use of the correction parameter for the decoded frame or frames that at least one of precedes and follows the decoded frame corresponding to the correction parameter that is going to be adjusted; and

carrying out the image enhancement processing on each of the decoded frames by using the adjusted parameter,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.

20. (Previously Presented) A machine-readable storage medium encoded with a computer program causing a computer to carry out image processing for obtaining processed compressed moving image data through image enhancement processing on compressed moving image data comprising an intra frame and inter frames, the image processing comprising:

dividing the compressed moving image data into the intra frame, target inter frames and non-target inter frames;

decoding the intra frame and the target inter frames for obtaining decoded frames comprising a decoded intra frame and decoded target inter frames;

carrying out the image enhancement processing on the decoded frames for obtaining corrected decoded frames;

encoding the corrected decoded frames for obtaining corrected frames; and

combining the corrected frames with the non-target inter frames for obtaining the processed compressed moving image data,

wherein carrying out the image enhancement processing is carrying out the image enhancement processing on the decoded intra frame by calculating a correction parameter therefor and on the decoded target inter frames by using the correction parameter of the decoded intra frame that immediately precedes the decoded target inter frames,

wherein the image enhancement processing comprises at least one of gradation correction, white balance correction, density correction, and sharpness processing.